UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,904	12/08/2003	Haru Ando	GOTO.0008	9309

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REED SMITH LLP
3110 FAIRVIEW PARK DRIVE, SUITE 1400
FALLS CHURCH, VA 22042

EXAMINER
MUSSELMAN, TIMOTHY A

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/728,904	ANDO ET AL.
	Examiner	Art Unit	
	Timothy Musselman	3714	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on 06 March 2007.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *2-8 and 10-19* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *2-8 and 10-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Status of Claims

In response to the amendment filed 3/6/2007, claims 2-8 and 10-19 are pending. Claims 1 and 9 have

been cancelled.

Claim Rejections - 35 USC § 101

The following is a quotation of 35 U.S.C. 101:

Whoever invents or discovers any new and useful process, machine, manufacture, or
composition of matter, or any new and useful improvement thereof, may obtain a patent
therefor, subject to the conditions and requirements of this title.

**Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-
statutory subject matter.**

[1] Claim 19 is explicitly defined as a software program. Although applicant claims the program as being

embedded in a computer readable medium, the claim is still for a *software program* embedded in a

computer readable medium. In order to be statutory subject matter, the data structure on the computer

readable medium must be descrived as linked to a system wherein the structural and functional

interrelationships between the data structure and other claimed aspects of the invention are capable of

being realized. See, e.g. Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per

se held nonstatutory). One example of an acceptable manner in which to describe applicants claim would

be "a computer readable medium containing a software program, operable when executed by a computer

to...". See MPEP 2106.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112;

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter
>
> which the applicant regards as the invention.

Claims 8, 10, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

[2] Regarding claims 8 and 16, applicant refers to a grouping section that extracts and matches "reply

locations". These "reply locations" have not been defined, and examiner is unable to infer any meaning

from the term, or determine any reason why a user of the system would have a location for a reply. While

examiner suspects that applicant might be referring to locations of the lecture media content supplied to

the student in a remedial manner in response to replies to questions from the system, this cannot be

reasonably concluded from the claim language. For the purposes of this office action, examiner will

consider claims 8 and 16 in the context of only matching *replies,* since applicant has not particularly

pointed out and distinctly claimed the subject matter which applicant regards as the invention in a manner

that allows for further analysis.

[3] Regarding claim 10, applicant refers to "the student terminal". Since a student terminal has not been

defined in the claims prior to this instance, there is a lack of antecedent basis for this limitation in the

claim. Additionally, it is noted that applicant subsequently refers to "a student terminal" in the same list of

items comprised within the invention. It is unclear whether this is accidental redundancy, or whether

applicant is attempting to claim an additional student terminal in the system. Since there is no language

referring to the second instance as an *additional* student terminal, the second instance will be treated as

referring to the same student terminal as the first instance for the purposes of this office action.

Claim Rejections - 35 USC § 103

The following is a quotation of the relevant portion of 35 U.S.C. 103 that forms the basis for the rejections

made in this section of the office action;

Claims 2-6 and 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norcott et al.

(US 6,775,518) in view of Morton et al. (US 2005/216443).

[4] Regarding claims 2 and 10; Norcott discloses an information management server to distribute lecture

material to a student terminal networked with said student terminal and an instructor terminal. See col. 4:

26-43 and col. 7: line 1. Norcott further discloses an accumulator section to accumulate electronic data on

said lecture contents. See col. 2: 62-65, and note that the 'content media storage' is analogous to an

accumulator section. Norcott further discloses a holding section to hold lecture-related information relating

to the lecture contents. See col. 2: 62-65, and note that the 'test database' is analogous to a holding

section for lecture related information, because the tests are related to the lectures (see col. 3: 19-22).

Norcott further discloses a send section to send said lecture contents and said lecture-related information

to said student terminal. See col. 4: 26-30. Norcott further discloses an analyzer section to analyze

electronic data on said lecture contents, and a matcher section to link said lecture-related information with

said lecture contents based on said analysis results. See col. 6: 5-10. Norcott further discloses a control

section for selecting lecture contents linked to said lecture related information based on a reply to said

lecture-related contents sent from said student terminal. See col. 6: 32-47. Norcott further discloses

wherein the lecture content can be in the form of digital video or audio (see col. 6: 13-14), but fails to

teach of an analyzer for extracting text information and/or drawing information from video information

contained in said lecture contents, and for extracting text information from audio or video information

contained in said lecture contents. However, Morton discloses a system for extracting searchable

information from media files that includes this feature. See paragraphs 0019 and 0059. Note that the

searchable index constitutes information *extracted* from the media file. Norcott further discloses wherein

said matching section matches relevant portions of the lecture content with the lecture related information

(see col. 6: 26-46). Morton fails to teach wherein said matching section links said video information with

said lecture-related information *based on* results from comparing said lecture-related information with said

extracted text information and/or drawing information. However, Morton teaches of extracting text

information from video files for the purpose of locating relevant portions of said video files. See paragraph

0059. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the

media searching capabilities of Morton, in the system of Norcott, so as to allow for the automated retrieval

of relevant portions of the lecture material. Norcott further discloses wherein said send section sends said

selected lecture contents to the student terminal that sent the reply to said lecture-related information.

See col. 6: 40-46.

[5] Regarding claims 3 and 11, Norcott fails to teach wherein said matcher section extracts words from

said text information, and selects said video information corresponding to word locations where specified

words frequently appear in said text information (i.e. relevance intervals). However, Morton teaches of

these features in paragraphs 0059 and 0060. Therefore, it would have been obvious to one with ordinary

skill in the art at the time of the invention. It would have been obvious to one of ordinary skill in the art at

the time of the invention to utilize the media searching capabilities of Morton, in the system of Norcott, so

as to allow for the automated retrieval of relevant portions of the lecture material.

[6] Regarding claims 4 and 12, Norcott fails to teach wherein said analyzer adds time information relating

to lecture contents comprising the source of said text information and/or said drawing information to the

extracted text information and/or drawing information. However, Morton teaches of this feature in

paragraphs 0059 and 0060. Norcott further fails to teach wherein said matcher section extracts words

from said text information, extracts time information on word locations where specified words frequently

appear in said text information (clustering of the occurrences), and selects said video information

corresponding to said time information. However, Norcott again teaches of these features in paragraphs 0059 and 0060. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the media searching capabilities of Morton, in the system of Norcott, so as to allow for the automated retrieval of relevant portions of the lecture material.

[7] Regarding claims 5 and 13, Norcott further discloses wherein said send section sends practice problems relating to said lecture contents as said lecture-related information, and said control section selects lecture contents linked with said practice problems based on true-false judgment results of replies to said practice problems sent from said student terminal. See col. 6: 22-46.

[8] Regarding claims 6 and 14, Norcott further discloses wherein said control section edits the video information contained in said selected lecture contents, and creates supplemental learning contents to send to said student terminal. See col. 6: 22-45, and note that since the lecture content can be digital video (col. 6: 13-14), and Morton describes replaying a relevant segment for a missed question, said segment is thus a sub-portion *edited* from of the whole.

Claims 7-8 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norcott et al. (US 6,775,518) in view of Morton et al. (US 2005/216443) and in further view of Remschel (US (6,411,796).

[9] Regarding claims 7-8 and 15-16, Norcott/Morton disclose a system that meets all of the limitations of parent claims 2 and 10 as described above, but fail to teach of a grouping section for sorting students into groups based on replies to said lecture-related information. However, Remschel discloses a networked educational system that includes this feature. See col. 8: 47-52. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to utilize the grouping aspects of Remschel in

the system of Norcott/Morton, in order to organize students into groups with similar educational needs so that they can be addressed as a single unit thus reducing the processing and communication overhead.

[10] Regarding claims 17 and 18, Norcott/Morton fail to teach wherein said instructor terminal displays said grouping of said sorted students, and wherein said instructor terminal controls communication to students sorted into the same groups according to the particular group. However, Remschel teaches of these features in col. 8: 45-58. . Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to utilize the grouping aspects of Remschel in the system of Norcott/Morton, in order to organize students into groups with similar educational needs so that they can be addressed as a single unit thus reducing the processing and communication overhead.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Remschel (US (6,411,796) in view of Norcott et al. (US 6,775,518).

[11] Regarding claim 19, Remschel discloses a program embedded in a computer readable medium for displaying students sorted into groups based on identical wrong replies to lecture contents, said replies being sent from student terminals. See col. 8: 47-58, and note that applicants claimed limitation of 'identical wrong replies' falls within the scope of 'success on prior assignments', which is further defined in col. 15: 20-35. Since the students are grouped based on roster data, and roster data contains test data that is weighted to reflect only particular answers to particular questions, the system of Remschel thus groups students according to identical wrong replies to particular questions. Remschel further discloses a module for displaying information to be specified by one of the students and a respective student terminal display screen. See col. 16: 10-19. Note that the information on the screen at the time the teacher took over operation of the student's computer would be 'specified by the student'. Remschel further discloses displaying the learning progress status of said student. See col. 15: 3-20. Remschel further discloses wherein lecture contents are distributed over a network to a server for distributing lecture contents from the instructor terminal to the students of a particular group. See col. 8: 45-58. Remschel fails to teach

wherein the lecture contents are supplemental. However, Norcott discloses a distributed educational system that includes this feature. See col. 6: 40-45. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention to incorporate the remedial aspects of Norcott into the system of Remschel, in order to provide a review for students in the most relevant topics.

Response to Arguments

[12] Applicant's arguments filed 3/06/2007 have been fully considered but they are not persuasive. Applicant argues that Morton only extracts data from media files, but does not correlate the data. Examiner points out that the correlation process is at least in the base reference of Norcott. See col. 6: 40-46. The missing feature from Norcott is not the correlation, but the correlation of data specifically *extracted from a media file*. Since Morton teaches of extracting data precisely for such correlation (See paragraph 0059), this deficiency of Norcott is overcome in view of Morton. Applicants arguments pertaining to claim 19 are moot in view of the new grounds of rejection.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Musselman whose telephone number is (571)272-1814. The examiner can normally be reached on Mon-Thu 6:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto, can be reached at (571)272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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ROBERT E. PEZZUTO
SUPERVISORY PRIMARY EXAMINER